0327 - Science & Technology Authority

Interim Progress Report for the reporting period July 1, 2003 - December 31, 2003

Section I. Agency Update and Assessment

1. Emerging Issues at the Federal (National) or State level affecting the agency.

FEDERAL RESEARCH. The Experimental Program to Stimulate Competitive Research Program (EPSCoR) at the National Science Foundation and the similar Institutional Development Award (IdeA) at the National Institutes of Health require state matching dollars. The Arkansas Research Matching Fund does not have an allocation this biennium putting the state's participation in these federal programs in jeopardy.

MANUFACTURING ASSISTANCE. The just passed federal FY 2004 Omnibus budget bill contains \$39.6M for the NIST MEP program. This represents a 63% reduction relative to the current funding level. If this 63% cut is passed on to the Arkansas Manufacturing Extension Network (Network), annual funding would drop from \$950K to \$350K.

2. Status of any new initiatives funded from General Revenue or General Improvement funds in the 2003 Legislative Sessions and other changes made through General Legislation.

TAX CREDITS. The tax-credit portion of the Consolidated Incentive Act of 2003 (Act 182 of 2003) is anticipated to stimulate private sector interest in both in-house corporate and university-based research, attracting private funding for research activities, and increasing the workload associated with monitoring, evaluating, and issuing research and development tax credits.

MANUFACTURING ASSISTANCE. General revenue funds for the Network have been used to fund Technology Transfer Assistance Grants for manufacturers.

3. Discuss significant factors internal and external to the agency affecting agency performance.

THE ECONOMY. The overall economic climate has had an impact on of one kind or another on all programs, a few of which are highlighted.

RESEARCH FUNDING. There are no research appropriations for either basic and applied research or research matching for this biennium. Restoration of these appropriations is needed to generate innovations and produce the "deal flow" for entrepreneurial activity.

MANUFACTURING. Some manufacturers perceive that they are unable to invest in continuous improvement projects, which has an impact on the Manufacturing Extension Network's performance. This should improve as the economy rebounds.

RISK CAPITAL. A multi-year effort to support the development of private equity capital in Arkansas has resulted in investments in some companies. Continued success depends upon a strong portfolio of Authority programs, including research support, technology transfer assistance (to leverage the federal SBIR Program), and the availability of seed capital.

EXTERNAL SUPPORT. The Winthrop Rockefeller Foundation has supported two projects: one on middle school science teaching, including a technology transfer effort, and a second on developing entrepreneurial activity and policy options.

4. Provide comments on the usefulness and reliability of performance measures.

LACK OF INPUT. Some of the projected metrics were not met due to a lack of appropriated input resources. THE ECONOMY. Some metrics were not met because of the unanticipated impact of the economy on the private sector and manufacturing market.

DATA COLLECTION. Performance results measured through the Network survey are influenced by the survey response rate, which is expected to improve as the Network works to increase the response rate.

5. Discuss significant uses of line item flexibility in this report period (agencies operating under Performance-Based Appropriations only).

Our agency was not selected to operate under performance-based appropriations at this time.

Program 1: Research and Commercialization Program

Goal 1: To stimulate the higher-education research infrastructure to generate more innovations through research activities, around which to develop new products and knowledge-based companies.

Objective 1: To increase innovations by increasing federal research and development expenditures in Arkansas.

Measur <u>Numbe</u>		Annual Target	Actual YTD	Comments
1	Size of basic research grant annual investment [at \$40,000 per project]	\$800,000	\$0	Requested \$900,000; Appropriated \$0
2	Five-year rate of return of federal follow-on awards as a ratio to basic research investments by fiscal year	2X	1.54X	For FY04 Cohort YTD (see more comments below)
3	Size of research matching and strategic research annual investment	\$2,000,000	\$0	Requested \$17,400,000; Appropriated \$0
4	Federal funds leveraged by ARMF and R&D Plan implementation divided by total federal R&D funds in AR	1:1	0	See #3

Comments on performance matters related to Objective 1:

Measure Nos. 1, 3 and 4 are output metrics that depend on inputs. There were no appropriations for Research in FY04, thus no inputs. For measure number 2, a cohort is the group of projects completed in the same fiscal year. We survey the principal investigators annually beginning one year after the close of a project and continue surveying for five years. We chose the projects completed in fiscal 2003 and surveyed for the first time in fiscal 2004.

Program 1: Research and Commercialization Program

Goal 2: To promote and influence the creation of emerging knowledge-based companies and facilitate increased private equity investments in such firms, thereby creating more jobs for knowledge workers and increasing instate employment opportunities for Arkansas college graduates.

Objective 1: To increase knowledge worker jobs through entrepreneurship and new company formation.

Measui Numbe		Annual Target	Actual YTD	<u>Comments</u>
1	Seed Capital Invested in terms of number of dollars invested	\$1.1 million in 3 deals	\$0 in 0 deals	
2	Number of companies and new enterprises enabled	14	5	Requested \$253,750; Appropriated \$83,750

Comments on performance matters related to Objective 1:

The number of companies and new enterprises enabled is lower than planned because the appropriation level for #2 was lower than requested.

Program 2: Technology and Manufacturing Extension Program

Goal 1: To maintain and transform existing enterprises into knowledge-based companies and increase their global competitiveness.

Objective 1: To strengthen existing Arkansas enterprises by improving their quality, productivity, and global competitiveness and transforming them into world-class firms.

Measur <u>Numbe</u>		<u>Annual Target</u>	Actual YTD	<u>Comments</u>
1	Applied research investment in public- private partnerships	\$500,000	\$0	Requested \$515,000; Appropriated \$0
2	Technology Transfer investments	\$427,000	\$105,515	Reduced level of funding. Requested \$461,250; Appropriated \$154,352
3	Manufacturing Extension investments	\$700,000	\$62,718	Reduced level of funding. Requested \$700,000; Appropriated \$259,027
4	Manufacturing Extension State Investment Leverage Ratio (Non- State Funding/State Funding)	1.4	10.3	The numerator in the ratio is larger due to drawing down more federal funds and the denominator is smaller because of fewer state funds.
5	Number of clients reporting quantitative impact more than \$100 (based on survey responses); i.e., the number of clients quantifying the expected impact of the project	21	13	Effects of the overall economy
6	Number of jobs created or retained	370	44	
7	Number of enterprises assisted per quarter	63	69	

Comments on performance matters related to Objective 1:

Measures are lower than planned for several reasons: the appropriation levels were lower than requested for measures # 1, 2, and 3 and the economy effects the ability of manufacturers to pay for extension services measured by # 5, 6, and 7.

Program 3: Management Services Program

Goal 1: To become a more effective and efficient organization through the application of quality management.

Objective 1: To administer programs more effectively and efficiently.

Measu Numbe		Annual Target	Actual YTD	Comments
1	Percent of performance targets met	100%	32%	
2	Percent of agency staff and budget in the Management Services Program compared to total agency positions and budget	25%	37%	
3	Information technology budget as a percent of total budget	3%	1.8%	
4	Number of proprietary information systems maintained by agency staff or maintained through contractual services	1	1	
5	Number of prior year audit findings repeated in subsequent audit	0	0	

Comments on performance matters related to Objective 1: